Journal of Neurosurgery

July 1987, Volume 67, Number 1

REVIEW ARTICLE:

The molecular genetics of nervous system tumors. HENRY H. SCHMIDEK 1

CLINICAL ARTICLES:

Surgical management of large AVM's by staged embolization and operative excision. ROBERT F. SPETZLER, NEIL A. MARTIN, L. PHILIP CARTER, RICHARD A. FLOM, PETER A. RAUDZENS, and ELIZABETH WILKINSON 17

Rerupture of intracranial aneurysms: a clinicoanatomic study. ALBERT HIJDRA, MARINUS VERMEULEN, JAN VAN GIJN, and HANS VAN CREVEL 29

Mapping human somatosensory cortex with positron emission tomography. PETER T. FOX, HAROLD BURTON, and MARCUS E. RAICHLE 34

Bilateral trigeminal neuralgia. RONALD BRISMAN 44

Long-term prospective study of lumbosacral discectomy. P. JEFFREY LEWIS, BRYCE K. A. WEIR, ROBERT W. BROAD, and MICHAEL G. GRACE 49

Basilar aneurysms: a new transclival approach via maxillotomy. DANIEL J. ARCHER, STEVEN YOUNG, and DAVID UTTLEY 54

Closure of extensive and complicated laminectomy wounds. Operative technique. BARRY M. ZIDE, JEFFREY H. WISOFF, and FRED J. EPSTEIN 59

Neoadjuvant chemotherapy for newly diagnosed germ-cell tumors of the central nervous system. JEFFREY C. ALLEN, JAE HO KIM, and ROGER J. PACKER 65

Effect of barbiturate coma on glucose utilization in normal brain versus gliomas. Positron emission tomography studies. J. BOB BLACKLOCK, EDWARD H. OLDFIELD, GIOVANNI DI CHIRO, DUNG TRAN, WILLIAM THEODORE, DONALD C. WRIGHT, and STEVEN M. LARSON 71

Effect of total parenteral nutrition upon intracranial pressure in severe head injury. BYRON YOUNG, LINDA OTT, DENNIS HAACK, DIANA TWYMAN, DAVID COMBS, J. B. OEXMANN, PHILLIP TIBBS, and ROBERT DEMPSEY 76

LABORATORY INVESTIGATIONS:

The therapeutic value of nimodipine in experimental focal cerebral ischemia. Neurological outcome and histopathological findings. ISABELLE M. GERMANO, HENRY M. BARTKOWSKI, MARY E. CASSEL, and LAWRENCE H. PITTS 81

Progressive ventricular enlargement in cats in the absence of transmantle pressure gradients. KENNETH SHAPIRO, IRA J. KOHN, FUTOSHI TAKEI, and CORINNA ZEE 88

Regulation of rCBF by intracortical vasoactive intestinal polypeptide-containing neurons. Immunohistochemical and hydrogen clearance study in rats. TORU ITAKURA, HIDEYOSHI YOKOTE, TAKASHI OKUNO, YUTAKA NAKA, KAZUO NAKAKITA, ICHIRO KAMEI, KUNIO NAKAI, HARUMICHI IMAI, and NORIHIKO KOMAI 93

Role of the medulla oblongata in plateau-wave development in dogs. MINORU HAYASHI, HISAMASA ISHII, YUJI HANDA, HIDENORI KOBAYASHI, HIROKAZU KAWANO, and MASANORI KABUTO 97

Evaluation of an intensive methylprednisolone sodium succinate dosing regimen in experimental spinal cord injury. J. MARK BRAUGHLER, EDWARD R. HALL, EUGENE D. MEANS, THOMAS R. WATERS, and DOUGLAS K. ANDERSON 102

A reproducible model of metastatic brain and ocular tumor by hematogenous inoculation of the VX2 tumor in rabbits. JOSEPH A. FRANK, MARY GIRTON, ANDREW J. DWYER, PAUL J. COHEN, RICHARD H. KNOP, RICHARD DIGGS, JOSEPH COBB, and JOHN L. DOPPMAN 106

A fluid percussion model of experimental brain injury in the rat. C. EDWARD DIXON, BRUCE G. LYETH, JOHN T. POVLISHOCK, ROBERT L. FINDLING, ROBERT J. HAMM, ANTHONY MARMAROU, HAROLD F. YOUNG, and RONALD L. HAYES 110

CASE REPORTS AND TECHNICAL NOTE:

Intracerebellar schwannoma. Case report. CHITRA SARKAR, V. S. MEHTA, and SUBIMAL ROY 120

Trigeminal nerve tumor: comparison of CT and MRI. Case report. RICHARD H. LYE, RICHARD T. RAMSDEN, JOHN P. STACK, and JAMES E. GILLESPIE 124

Symptomatic subependymoma of the cervical spinal cord. Report of two cases. K. STUART LEE, JEAN N. ANGELO, JOE M. MCWHORTER, AND COURTLAND H. DAVIS, JR. 128

Chronic granulomatous disease with cranial fungal osteomyelitis and epidural abscess. Case report. IAN F. POLLACK, DACHLING PANG, and KENNETH E. SCHUIT 132

Neuroepithelial cyst in the optic nerve. Case report. ALBERTO ISLA, JOSÉ PALACIOS, JOSÉ M. RODA, MANUEL GUTIERREZ, CESÁREO GONZÁLEZ, and MARTÍN G. BLÁZQUEZ 137

A rapid and modifiable technique for regional exposure in cerebral surgery. Technical note. KONSTANTIN V. ELISEVICH, AUSTIN R. T. COLOHAN, STEVEN BREM, and YOUSSEF COMAIR 140

BOOK REVIEWS 143

NEUROSURGICAL FORUM: Letters to the editor 149

NOTICES 154

Journal of Neurosurgery

August 1987, Volume 67, Number 2

REVIEW ARTICLE:

Opioid receptor systems and the endorphins: a review of their spinal organization. TONY L. YAKSH 157

CLINICAL ARTICLES:

Observations on the current treatment of low-grade astrocytic tumors of the cerebral hemispheres. JOSEPH M. PIEPMEIER 177

Chronic intrathecal morphine for intractable pain. RICHARD D. PENN, and JUDITH A. PAICE 182

Chemonucleolysis with chymopapain: results in 150 patients. CHRISTOPHER B. SHIELDS, STEVEN J. REISS, and HENRY D. GARRETSON 187

Hyperprolactinemia, intrasellar pituitary tissue pressure, and the pituitary stalk compression syndrome. PETER D. LEES, and JOHN D. PICKARD 192

Long-term effects of head injuries sustained during life in three male populations. GUDRUN SILVERBÅGE CARLSSON, KURT SVÄRDSUDD, and LENNART WELIN 197

Continuous monitoring of intracranial pressure with a miniaturized fiberoptic device. RICHARD C. OSTRUP, THOMAS G. LUERSSEN, LAWRENCE F. MARSHALL, and MARK H. ZORNOW 206

Cortical localization and monitoring during cerebral operations. ROBERT B. KING, and GERALD R. SCHELL 210

CT-stereotaxic drainage of colloid cysts in the foramen of Monro and the third ventricle. MOHSEN MOHADJER, ELEMER TESHMAR, and FRITZ MUNDINGER 220

Statistical analysis of clinicopathological features, radiotherapy, and survival in 170 cases of oligodendroglioma. KARL-FREDRIK LINDEGAARD, SVERRE J. MØRK, GEIR E. EIDE, TORE B. HALVORSEN, REIDULV HATLEVOLL, TORFINN SOLGAARD, OLAV DAHL, and JEREMY GANZ 224

LABORATORY INVESTIGATIONS:

Activation of immunoregulatory lymphocytes obtained from patients with malignant gliomas. LUCINDA H. ELLIOTT, WILLIAM H. BROOKS, and THOMAS L. ROSZMAN 231

Estrogen receptor immunoreactivity in meningiomas. Comparison with the binding activity of estrogen, progesterone, and androgen receptors. KLAUS-PETER LESCH, and SILKE GROSS 237

Cochlear nerve injuries caused by cerebellopontine angle manipulations. An electrophysiological and morphological study in dogs. TETSUJI SEKIYA, and AAGE R. MØLLER 244

Factors responsible for the retention of fluid in human tumor edema and the effect of dexamethasone. WOLFRAM BODSCH, THOMAS ROMMEL, BERND GROSSE OPHOFF, and JÜRGEN MENZEL 250

Alpha-1-antitrypsin in human brain tumors. RAYMOND SAWAYA, MARIO ZUCCARELLO, and ROBERT HIGHSMITH 258

Effect of intracranial pressure on bridging veins in rats. LUDWIG M. AUER, NORIO ISHIYAMA, KEES C. HODDE, REINHOLD KLEINERT, and ROBERT PUCHER 263

Lumbosacral intersegmental epispinal axons and ectopic ventral nerve rootlets. WESLEY W. PARKE, and RYO WATANABE 269

Beagle pup model of brain injury: regional cerebral blood flow and cerebral prostaglandins. LAURA R. MENT, WILLIAM B. STEWART, CHARLES C. DUNCAN, BRUCE R. PITT, and JUDITH COLE 278

Laser-sealed arteriotomy: a reliable aneurysm model. MATTHEW R. QUIGLEY, KENNETH HEIFERMAN, HAU C. KWAAN, DANKO VIDOVICH, PETER NORA, and LEONARD J. CERULLO 284

Bursting pressure of experimental aneurysms. MATTHEW R. QUIGLEY, KENNETH HEIFERMAN, HAU C. KWAAN, DANKO VIDOVICH, PETER NORA, and LEONARD J. CERULLO 288

CASE REPORTS:

Reliability of left and right indicators in CT scanning of the head. Case report. ALFRED J. LUESSENHOP, and DIETER SCHELLINGER 291

Interhemispheric approach for carotid-ophthalmic artery aneurysm clipping. Case report. NOBUHIKO AOKI 293

Dissecting aneurysms of the anterior circle of Willis arteries. Report of two cases. RYUICHI KITANI, TOORU ITOUJI, YATSUGI NODA, MAKOTO KIMURA, and SATOSHI UCHIDA 296

Cervico-occipital teratoma in the newborn infant. Case report. NORAH NAOR, PAUL MERLOB, YECHIEL HEILBRONN, NITSA ZIV, and SALOMON H. REISNER 301

Lipoma of the infundibulum. Case report. STEFANO ESPOSITO, and PIERVITTORIO NARDI 304

A combined neurilemmoma and angioma of the parasellar region. Case report. VIRA KASANTIKUL, SAMRUAY SHUANGSHOTI, PORNYUDH PREECHAYUDH, and SOMJAI WANGSUPHACHART 307

BOOK REVIEWS 312

NEUROSURGICAL FORUM: Letters to the editor 318

NOTICES 325

Journal of Neurosurgery

September 1987, Volume 67, Number 3

CLINICAL ARTICLES:

157 **The risk of rebleeding from ruptured intracranial aneurysms.** JARL ROSENØRN, VAGN ESKESEN, KAARE SCHMIDT, and FRITS RØNDE 329

Long-term results of surgically treated congenital intradural spinal arachnoid cysts. CARLO ALVISI, MARZIANO CERISOLI, MARCO GIULIONI, and LORENZO GUERRA 333

177 **Oxidative metabolism and glycolysis in benign brain tumors.** TERRY LICHTOR, and GEORGE J. DOHRMANN 336

182 **Comparison of CT-guided and stereotaxic cranial diagnostic needle biopsies.** SIMON GOLDSTEIN, MARY KATHERINE GUMERLOCK, and EDWARD A. NEUWELT 341

187 **Cervical spine stenosis secondary to ossification of the posterior longitudinal ligament.** GRIFFITH R. HARSH IV, GEORGE W. SYPERT, PHILIP R. WEINSTEIN, DONALD A. ROSS and CHARLES B. WILSON 349

192 **C-Reactive protein levels in the differential diagnosis of brain abscesses.** HENRY HIRSCHBERG, and VIDAR BOSNES ... 358

197 **The predictive value of cerebral anaerobic metabolism with cerebral infarction after head injury.** CLAUDIA S. ROBERTSON, ROBERT G. GROSSMAN, J. CLAY GOODMAN, and RAJ K. NARAYAN 361

206 LABORATORY INVESTIGATIONS:

210 **Pressure-volume index as a function of cerebral perfusion pressure. Part 1: The effects of cerebral perfusion pressure changes and anesthesia.** W. JOHN GRAY, and MICHAEL J. ROSNER 369

220 **Pressure-volume index as a function of cerebral perfusion pressure. Part 2: The effects of low cerebral perfusion pressure and autoregulation.** W. JOHN GRAY, and MICHAEL J. ROSNER 377

224 **Effects of increased ICP on brain phosphocreatine and lactate determined by simultaneous ^{1}H and ^{31}P NMR spectroscopy.** LESLIE N. SUTTON, ALAN C. MCLAUGHLIN, WILLIAM KEMP, M. D. SCHNALL, BYUNG-KU CHO, THOMAS W. LANGFITT, and BRITTON CHANCE 381

The effect of nimodipine on intracranial pressure. Volume-pressure studies in a primate model. MARK N. HADLEY, ROBERT F. SPETZLER, MARY S. FIFIELD, WILLIAM D. BICHARD, and JOHN A. HODAK 387

231 **Recombinant human tissue-type plasminogen activator therapy in acute thromboembolic stroke.** STEPHEN M. PAPADOPOULOS, WILLIAM F. CHANDLER, M. SHAHRIAR SALAMAT, ERIC J. TOPOL, and J. CHRIS SACKELLARES 394

237 **Digital angiographic quantification of blood flow dynamics in embolic stroke treated with tissue-type plasminogen activator.** PHILLIP KISSEL, BAHRAM CHEHRAZI, JAMES A. SEIBERT, and FRANKLIN C. WAGNER, JR 399

244 **Effect of dihydropyridines and diphenylalkylamines on pentylenetetrazol-induced seizures and cerebral blood flow in cats.** MAX E. OTS, TONY L. YAKSH, ROBERT E. ANDERSON, and THORALF M. SUNDT, JR 406

250 **Immunohistochemical investigation of cerebral ischemia after middle cerebral artery occlusion in gerbils.** KAZUMI YAMAMOTO, FUMIHARU AKAI, TOSHIKI YOSHIMINE, and TAKEHIKO YANAGIHARA 414

258 **Effects of preexisting bypass graft on rCBF and SSEP's following acute stroke in dogs.** CHRISTOPHER M. LOFTUS, JULIUS A. SILVIDI, DANIEL D. BERNSTEIN, PATRICK W. HITCHON, and TODD KOSIER 421

263 **Oculomotor nerve regeneration in rats. Functional, histological, and neuroanatomical studies.** EDUARDO FERNANDEZ, ROBERTO PALLINI, CARLO GANGITANO, AURORA DEL FÀ, CORRADO OLIVIERI SANGIACOMO, GIUSEPPE TALAMONTI, FRANCESCO DRAICCHIO, and ALESSANDRO SBRICCOLI 428

269 **Bacterial adhesion to cerebrospinal fluid shunts.** JUAN A. GUEVARA, GRACIELA ZÚCCARO, ALEJANDRO TREVISÁN, and CLAUDIO D. DENOYA 438

278 CASE REPORTS AND TECHNICAL ARTICLE:

284 **Pathological and radiological correlation of subarachnoid hemorrhage in phencyclidine abuse. Case report.** OREST B. BOYKO, PETER C. BURGER, and E. RALPH HEINZ 446

288 **Desmoplastic fibroma of parietal bone simulating eosinophilic granuloma. Case report.** THIERRY J. HUFNAGEL, CARLOS ARTILES, JOSEPH PIEPMEIER, LEON KIER, and JUNG H. KIM 449

291 **Spinal meningioma *en plaque*. Report of two cases.** MICHAEL T. STECHISON, RONALD R. TASKER, and GEORGE WORTZMAN 452

293 **Metameric capillary hemangioma producing complete myelographic block in an infant. Case report.** JOHN R. MAWK, LYAL G. LEIBROCK, RODNEY D. MCCOMB, and EDMUND J. TREMBATH 456

296 **Audible cerebrospinal fluid flow through a ventriculoperitoneal shunt. Report of two cases.** JOE I. ORDIA, RONALD W. MORTARA, and EDWARD L. SPATZ 460

301 **Preservation of the frontotemporal branch of the facial nerve using the interfascial temporalis flap for pterional craniotomy. Technical article.** M. GAZI YAŞARGIL, MARK V. REICHMAN, and STEFAN KUBIK 463

304 BOOK REVIEWS 467

307 NEUROSURGICAL FORUM: Letters to the editor 471

312 NOTICES 478

318

325

Journal of Neurosurgery

October 1987, Volume 67, Number 4

CLINICAL ARTICLES:

Intra-axial tumors of the cervicomedullary junction. FRED EPSTEIN, and JEFFREY WISOFF 483

Subtemporal-preauricular infratemporal fossa approach to large lateral and posterior cranial base neoplasms. LALIGAM N. SEKHAR, VICTOR L. SCHRAMM, JR., and NEIL F. JONES 488

Adjuvant high-dose photoradiation therapy in the treatment of cerebral glioma: a Phase 1–2 study. ANDREW H. KAYE, GEORGE MORSTYN, and DAVID BROWNBILL 500

Monitoring of ^{57}Co-bleomycin delivery to brain metastases and their tumors of origin. DOV FRONT, EINAT EVEN-SAPIR, GALINA IOSILEVSKY, ORA ISRAEL, ALEX FRENKEL, GERALD M. KOLODNY, and MOSHE FEINSUD 506

Surgical approaches to trigonal arteriovenous malformations. HUNT BATJER, and DUKE SAMSON 511

The MRI appearance of cavernous malformations (angiomas). DANIELE RIGAMONTI, BURTON P. DRAYER, PETER C. JOHNSON, MARK N. HADLEY, JOSEPH ZABRAMSKI, and ROBERT F. SPETZLER 518

The rCBF response to Diamox in normal subjects and cerebrovascular disease patients. HUMBERT G. SULLIVAN, THEODORE B. KINGSBURY IV, MARY E. MORGAN, RONNIE D. JEFFCOAT, JERRY D. ALLISON, JAMIE J. GOODE, and DENNIS E. MCDONNELL 525

Relationships between intracranial pressure, ventricular size, and resistance to CSF outflow. SVEND E. BØRGESEN, and FLEMMING GJERRIS 535

A prospective analysis of 142 carotid endarterectomies for occlusive vascular disease, 1979–1985. H. EVAN ZEIGER, JR., EDWARD J. ZAMPELLA, DAVID C. NAFTEL, ROBERT D. MCKAY, PAMELA D. VARNER, and RICHARD B. MORAWETZ 540

Primary cerebellar hemorrhage. Quadrigeminal cistern obliteration on CT scans as a predictor of outcome. MAMORU TANEDA, TORU HAYAKAWA, AND HEITARO MOGAMI 545

LABORATORY INVESTIGATIONS:

Specific induction of ACNU-resistance in V79 Chinese hamster cells and C6 rat glioma cells. YUKIO HORIE, KENJI ARAI, SHUNRO ENDOH, TOSHIO KUROKI, and AKIRA TAKAKU 553

The effect of timing of clot removal on chronic vasospasm in a primate model. YUJI HANDA, BRYCE K. A. WEIR, MICHAEL NOSKO, RUSS MOSEWICH, TSUTOMU TSUJI, and MICHAEL GRACE 558

Effect of hypoxia on the contractile response to KCl, prostaglandin $F_{2\alpha}$, and hemoglobin. TADAYOSHI NAKAGOMI, NEAL F. KASSELL, TOMIO SASAKI, SHIGERU FUJIWARA, R. MICHAEL LEHMAN, HIROO JOHSHITA, and JAMES C. TORNER 565

The effect of craniectomy on the biomechanics of normal brain. SHIZUO HATASHITA, and JULIAN T. HOFF 573

Nonsuture microvascular anastomosis using an Nd-YAG laser and a water-soluble polyvinyl alcohol splint. KYO HUANG NIIJIMA, YASUHIRO YONEKAWA, HAJIME HANDA, and WARO TAKI 579

Mineralization and biodegradation of CSF shunting systems. KOUHEI ECHIZENYA, MASAHARU SATOH, HIROSHI MURAI, HIROO UENO, HIROSHI ABE, and TAKASHI KOMAI 584

CASE REPORTS AND TECHNICAL NOTE:

Magnetic resonance imaging and computerized tomography scanning of herpes simplex encephalitis. Report of two cases. ERIC W. NEILS, ROBERT LUKIN, THOMAS A. TOMSICK, and JOHN M. TEW 592

Congenital fourth ventricular midline outlet obstruction. Report of two cases. STEPHANIE RIFKINSON-MANN, VED P. SACHDEV, and YUNG PENG HUANG 595

Tethered cervical spinal cord. Case report. THEODORE W. ELLER, LAWRENCE P. BERNSTEIN, RICHARD S. ROSENBERG, and DAVID G. MCLONE 600

Arteriovenous malformation in moyamoya syndrome. Report of three cases. TERRY LICHTOR, and SEAN MULLAN 603

Stump embolization from an occluded internal carotid artery. Case report. PATRICK G. RYAN, and ARTHUR L. DAY 609

Lymphomatoid granulomatosis apparently confined to one temporal lobe. Case report. RICHARD S. C. KERR, J. T. HUGHES, TRUDI BLAMIRES, and PETER J. TEDDY 612

Further modifications for the Frazier suction device. Technical note. ROBIN I. DAVIDSON, and CYRIL RODGERS 616

BOOK REVIEWS 618

NEUROSURGICAL FORUM: **Letters to the Editor** 626

NOTICES 629

Journal of Neurosurgery

November 1987, Volume 67, Number 5

AANS Presidential Address, 1987: The tradition of Harvey Cushing commemorated by a stamp in the Great American stamp series. ROBERT G. OJEMANN 631

Clinical Articles:

Results of lumbar discectomy in the pediatric patient. MICHAEL J. EBERSOLD, LYNN M. QUAST, and ANTHONY J. BIANCO, JR 643

Outcome after severe head injury. Relationship to mass lesions, diffuse injury, and ICP course in pediatric and adult patients. ANTHONY M. ALBERICO, JOHN D. WARD, SUNG C. CHOI, ANTHONY MARMAROU, and HAROLD F. YOUNG 648

Neurobehavioral functioning and magnetic resonance imaging findings in young boxers. HARVEY S. LEVIN, STEPHEN C. LIPPOLD, ARNOLD GOLDMAN, STANLEY HANDEL, WALTER M. HIGH, JR., HOWARD M. EISENBERG, and DAVID ZELITT 657

The effect of nutritional support on outcome from severe head injury. BYRON YOUNG, LINDA OTT, DIANA TWYMAN, JANE NORTON, ROBERT RAPP, PHILLIP TIBBS, DENNIS HAACK, BRACK BRIVINS, and ROBERT DEMPSEY 668

Magnetic resonance images of chronic subdural hematomas. KOHKICHI HOSODA, NORIHIKO TAMAKI, MICHIO MASUMURA, SATOSHI MATSUMOTO, and FUMIO MAEDA 677

Lesions in Meckel's cave: variable presentation and pathology. DAVID W. BECK, and ARNOLD H. MENEZES 684

Laboratory Investigations:

Collagen type III deficiency in patients with rupture of intracranial saccular aneurysms. JOHN R. ØSTERGAARD, and HANS OXLUND 690

Quantitative study of microvessel ultrastructure in human peritumoral brain tissue. Evidence for a blood-brain barrier defect. PATRICIA A. STEWART, KAY HAYAKAWA, CATHERINE L. FARRELL, and ROLANDO F. DEL MAESTRO 697

Effect of hypertension on small-vessel healing after microvascular anastomosis. PAUL D. DERNBACH, JOEL B. MYKLEBUST, and JOSEPH F. CUSICK 706

Experimental chronic subdural hematoma in mice. Gross morphology and light microscopic observations. HISASHI AIKAWA, and KINUKO SUZUKI 710

Reevaluation of an experimental streptococcal canine brain abscess model. HENRY KURZYDLOWSKI, CYNTHIA WOLLENSCHLAGER, FRANK R. VENEZIO, MONA GHOBRIAL, MORRIS MARC SORIANO, and O. HOWARD REICHMAN 717

Carotid artery mixing with diastole-phased pulsed drug infusion. STEPHEN C. SARIS, DANIEL R. SHOOK, RONALD G. BLASBERG, ROBERT L. DEDRICK, JOHN L. DOPPMAN, KRZYSZTOF S. BANKIEWICZ, J. BOB BLACKLOCK, and EDWARD H. OLDFIELD 721

Uniformity of intracarotid drug distribution with diastole-phased pulsed infusion. DANIEL R. SHOOK, LISA M. BEAUDET, and JOHN L. DOPPMAN 726

Experimental intracerebral mass: time-related effects on local cerebral blood flow. THOMAS A. KINGMAN, A. DAVID MENDELOW, DAVID I. GRAHAM, and GRAHAM M. TEASDALE 732

Protection against spinal cord ischemia with insulin-induced hypoglycemia. CLAUDIA S. ROBERTSON, and ROBERT G. GROSSMAN 739

Photochemically induced graded spinal cord infarction. Behavioral, electrophysiological, and morphological correlates. RICARDO PRADO, W. DALTON DIETRICH, BRANT D. WATSON, MYRON D. GINSBERG, and BARTH A. GREEN 745

Case Reports:

Bilateral anomalous course of the ulnar nerve at the wrist causing ulnar and median nerve compression syndrome. Case report. RENATO J. GALZIO, VINCENZO MAGLIANI, DANILO LUCANTONI, and CORRADO D'ARRIGO 754

Neurosurgical management of carotid sinus hypersensitivity. Report of three cases. RICHARD K. SIMPSON, JR., JAMES L. POOL, ROBERT G. GROSSMAN, JAMES E. ROSE, and ADDISON A. TAYLOR 757

Symptomatic spinal epidural lipomatosis as a complication of steroid immunosuppression in cardiac transplant patients. Report of two cases. EDWARD J. ZAMPELLA, ERNEST R. DUVALL, B. CHANDRA SEKAR, KEITH H. LANGFORD, ANDREW E. EPSTEIN, JAMES K. KIRKLIN, AND RICHARD B. MORAWETZ 760

Unusual intercarotid anastomosis associated with anterior communicating artery aneurysm. Case report. PATRICK T. TRACY 765

Pituicytoma (pilocytic astrocytoma). Case report. MARCO L. ROSSI, JOHN S. BEVAN, MARGARET M. ESIRI, JOHN T. HUGHES, and CHRISTOPHER B. T. ADAMS 768

Symptomatic intracranial pneumatocele from mastoid sinus of spontaneous origin. Case report. JOSEPH STAVAS, ROBERT E. MCGEACHIE, DENNIS A. TURNER, and MARY JO NELSON 773

Postoperative magnetic resonance imaging artifacts. Report of three cases. RAIMUND P. FIRSCHING, WALTER HEINDEL, RALF-INGO ERNESTUS, REINHOLD A. FROWEIN, AND JÜRGEN BUNKE 776

Book Reviews 779

Neurosurgical Forum: Letters to the editor 783

Notices 791

Journal of Neurosurgery

December 1987, Volume 67, Number 6

CLINICAL ARTICLES:

Spinal arteriovenous malformations. a comparison of dural arteriovenous fistulas and intradural AVM's in 81 patients. BRUCE ROSENBLUM, EDWARD H. OLDFIELD, JOHN L. DOPPMAN, and GIOVANNI DI CHIRO 795

Growth rate of human pituitary adenomas. ALEX M. LANDOLT, TAICHIRO SHIBATA, and PAUL KLEIHUES 803

Short-term preoperative treatment of macroprolactinomas by dopamine agonists. RUDOLF FAHLBUSCH, MICHAEL BUCHFELDER, and UWE SCHRELL 807

Prolactin-secreting adenomas: the preoperative response to bromocriptine treatment and surgical outcome. JERRY L. HUBBARD, BERND W. SCHEITHAUER, CHARLES F. ABBOUD, and EDWARD R. LAWS, JR. 816

Cerebral hemodynamics in angioma patients: an intraoperative study. WERNER HASSLER and HELMUTH STEINMETZ 822

Pressure-volume index in head injury. ANGELO L. MASET, ANTHONY MARMAROU, JOHN D. WARD, SUNG CHOI, HARRY A. LUTZ, DANNY BROOKS, RICHARD J. MOULTON, ANTONIO DESALLES, J. PAUL MUIZELAAR, HOPE TURNER, and HAROLD F. YOUNG 832

A comparison of intraparenchymatous and intraventricular pressure recording in clinical practice. GÖRAN SUNDBÄRG, CARL-HENRIK NORDSTRÖM, KENNETH MESSETER, and SVEN SÖDERSTRÖM 841

Nutritional support and measured energy expenditure of the child and adolescent with head injury. RENEE PHILLIPS, LINDA OTT, BYRON YOUNG, and JOHN WALSH 846

Significance of hemorrhage into brain tumors: clinicopathological study. DOUGLAS KONDZIOLKA, MARK BERNSTEIN, LOTHAR RESCH, CHARLES H. TATOR, J. F. ROSS FLEMING, R. G. VANDERLINDEN, and HART SCHUTZ 852

Efficacy of irradiation for incompletely excised acoustic neurilemomas. KENT E. WALLNER, GLENN E. SHELINE, LAWRENCE H. PITTS, WILLIAM M. WARA, RICHARD L. DAVIS, and EDWIN B. BOLDREY 858

Recurrent malignant gliomas: survival following interstitial brachytherapy with high-activity iodine-125 sources. PHILIP H. GUTIN, STEVEN A. LEIBEL, WILLIAM M. WARA, ALI CHOUCAIR, VICTOR A. LEVIN, THEODORE L. PHILIPS, PAMELA SILVER, VASCO DA SILVA, MICHAEL S. B. EDWARDS, RICHARD L. DAVIS, KEITH A. WEAVER, and SHARON LAMB 864

LABORATORY INVESTIGATIONS:

Inhibition of lymphocyte responsiveness by a glial tumor cell-derived suppressive factor. THOMAS L. ROSZMAN, WILLIAM H. BROOKS, and LUCINDA H. ELLIOTT 874

Vascular permeability induced by protein product of malignant brain tumors: inhibition by dexamethasone. JEFFREY N. BRUCE, GREGORY R. CRISCUOLO, MARSHA J. MERRILL, ROSS R. MOQUIN, J. BOB BLACKLOCK, and EDWARD H. OLDFIELD 880

Drug cytotoxicity at elevated temperature. *In vitro* study on the U-87MG glioma cell line. VASCO F. DA SILVA, GJISBERT P. RAAPHORST, RAVI GOYAL, and MARK FEELEY 885

Interstitial laser photochemotherapy of rhodamine-123-sensitized rat glioma. STEPHEN K. POWERS, WILLIAM C. BECKMAN, JR., J. TONY BROWN, and LINDA C. KOLPACK 889

The effect of ^{125}I interstitial radiotherapy on blood-brain barrier function in normal canine brain. DENNIS R. GROOTHUIS, DONALD C. WRIGHT, and CHRISTOPH B. OSTERTAG 895

Experimental induction of cerebral aneurysms in monkeys. NOBUO HASHIMOTO, CHOEGON KIM, HARUHIKO KIKUCHI, MASAYUKI KOJIMA, YOO KANG, and FUMITADA HAZAMA 903

The sympathetic nervous system and atherosclerosis. TERRY LICHTOR, HARRY R. DAVIS, LYDIA JOHNS, DRAGA VESSELINOVITCH, ROBERT W. WISSLER, and SEAN MULLAN 906

CASE REPORTS:

Glioblastoma developing at the site of a cerebellar medulloblastoma treated 6 years earlier. Case report. MANFRED SCHMIDBAUER, HERBERT BUDKA, ROBERT BRUCKNER, and PETER VORKAPIC 915

Effect of radiation therapy on extracerebral cavernous hemangioma in the middle fossa. Report of three cases. SHOBU SHIBATA, and KAZUO MORI 919

Melanoma arising in a spinal nerve root. Case report. STEVEN J. SCHNEIDER, J. BOB BLACKLOCK, and JANET M. BRUNER 923

Cystic schwannoma of the trochlear nerve mimicking a brain-stem tumor. Case report. PAUL DOUGLAS GAREN, CLIVE GORDON HARPER, CHARLES TEO, and IAN HUGH JOHNSTON 928

Sparganosis of the brain. Report of two cases. SZE-TONG CHAN, C. H. TSE, Y. S. CHAN, and DAWSON FONG 931

Pseudoaneurysm of the extracranial vertebral artery. Case report. KARL DETWILER, JOHN C. GODERSKY, and LINDELL GENTRY 935

Hemodynamic analysis of associated extracranial atraumatic vertebral artery aneurysm and arteriovenous fistula. Case report. BRUCE ROSENBLUM, STEPHANIE RIFKINSON-MANN, MICHAEL SACHER, ROSEMARIA GENNUSO, and ALLEN ROTHMAN 940

BOOK REVIEWS 944

NEUROSURGICAL FORUM: Letters to the editor 951

NOTICES 957

INDEX TO VOLUME 67 960

s.
795
803
L
807
816
822
Y
d
832
841
846
852
858
864
M
874
Y
880
T
885
889
895
903
906
915
919
923
928
931
935
940
944
951
957
960